

CEMENT MASONRY

A student who has completed the Job Corps Cement Masonry program is equipped with the skills to contribute to your company as a valued employee from day one. Competence in academic and vocational skills is required for graduation. In addition, Job Corps students learn employability and technological skills. To complete his or her Cement Masonry training, a student must master skills in these categories:

BASIC WORK TECHNIQUES

Choose proper tools; understand the importance of Uniformity of the Subgrade; have knowledge of tools and equipment used for filing and compaction; demonstrate procedures and techniques for tools used in digging; pick and shovel work; identify tools and methods for vibrating concrete; understand different types of reinforcements; use different jackhammering operations.

GENERAL SAFETY

Demonstrate appropriate safety precautions; wear proper safety equipment and clothing; follow prescribed OSHA standards.

HAND TOOLS AND EQUIPMENT SAFETY

Demonstrate the ability to use tools for purpose intended; keep tools in good repair, clean, sharp and free of rust; keep tools out of the paths of co-workers; report all injuries immediately to proper personnel; identify locations of all first-aid equipment and materials; act quickly and appropriately when a fellow worker is in immediate danger.

HAND TOOL IDENTIFICATION AND USAGE

Identify and demonstrate the uses of basic hand tools used in cement masonry; store and care for hand tools; use and maintain tape measures, levels, laser levels and builder's transit levels.

POWER TOOL IDENTIFICATION AND USAGE

Identify and demonstrate the uses of power tools in cement masonry (troweling machine, concrete saw, vibrating screed, power grinders, jack hammers and power handsaw); care for and maintain power tools; set up power tools correctly.

BLEUPRINT READING

Read basic drawings and sketches and understand the information contained in them.

FUNDAMENTALS OF CONCRETE

Identify materials used to make concrete; know formula proportions for mixing different types of concrete for patch and match; know agents and concrete additives and when to use them.

FORMING TOOLS

Identify forming tools; inspect, assemble and disassemble scaffolding.

TRADE TERMINOLOGY

Identify terms used in cement masonry; verbalize using the terminology.

BASIC MATH

Read the inch; multiply and divide whole numbers and decimals; multiply to determine volume; convert cubic feet to cubic yards.

METHODS

Lay out stamp finish; place concrete; identify tools and procedures for striking off; use a bull float and darby; identify purpose of and perform edging and jointing; trowel with a hand float.

CURBS, GUTTERS, SIDEWALKS AND STEP FORMS

Identify tools used in setting curbs and gutters; check grades properly; set string line, stakes and curb form properly; place curb; follow proper procedures for finishing; strip a form; apply epoxy to finishes; use overlayments for skimming or leveling floors.

